

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

IN THE CLAIMS:

Please amend the claims as follows:

1-2. (Currently canceled)

D 11
3. (Currently amended) The An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 1, ~~or has at least about 60% similarity to SEQ ID NO: 1, or hybridizes to SEQ ID~~
~~NO: 1 under low stringency conditions, wherein said conditions comprise hybridization at 42°C~~
~~in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about~~
~~1M to about 2M salt.~~

4. (Currently amended) The An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 3, ~~or has at least about 60% similarity to SEQ ID NO: 3, or hybridizes to SEQ ID~~
~~NO: 3 under low stringency conditions, wherein said conditions comprise hybridization at 42°C~~
~~in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about~~
~~1M to about 2M salt.~~

5. (Currently amended) The An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 5, ~~or has at least about 60% similarity to SEQ ID NO: 5, or hybridizes to SEQ ID~~
~~NO: 5 under low stringency conditions, wherein said conditions comprise hybridization at 42°C~~
~~in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about~~
~~1M to about 2M salt.~~

6. (Currently amended) The An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 7, ~~or has at least about 60% similarity to SEQ ID NO: 7, or hybridizes to SEQ ID~~
~~NO: 7 under low stringency conditions, wherein said conditions comprise hybridization at 42°C~~

in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.

7. (Currently amended) The An isolated nucleic acid molecule according to claim 2, wherein said nucleic acid molecule comprises a comprising the nucleotide sequence as set forth in SEQ ID NO: 9, or has at least about 60% similarity to SEQ ID NO: 9, or hybridizes to SEQ ID NO: 9 under low stringency conditions, wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.

8. (Currently amended) The An isolated nucleic acid molecule according to claim 2, wherein said nucleic acid molecule comprises a comprising the nucleotide sequence as set forth in SEQ ID NO: 14, or has at least about 60% similarity to SEQ ID NO: 14, or hybridizes to SEQ ID NO: 14 under low stringency conditions, wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.

9. (Currently amended) The An isolated nucleic acid molecule according to claim 2, wherein said nucleic acid molecule comprises a comprising the nucleotide sequence as set forth in SEQ ID NO: 16, or has at least about 60% similarity to SEQ ID NO: 16, or hybridizes to SEQ ID NO: 16 under low stringency conditions, wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.

10. (Currently amended) The An isolated nucleic acid molecule according to claim 2, wherein said nucleic acid molecule comprises a comprising the nucleotide sequence as set forth in SEQ ID NO: 18, or has at least about 60% similarity to SEQ ID NO: 18, or hybridizes to SEQ ID NO: 18 under low stringency conditions, wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.

11. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 20, ~~or has at least about 60% similarity to SEQ ID NO: 20, or hybridizes to SEQ~~
~~ID NO: 20 under low stringency conditions, wherein said conditions comprise hybridization at~~
~~42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with~~
~~about 1M to about 2M salt.~~

12. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 22, ~~or has at least about 60% similarity to SEQ ID NO: 22, or hybridizes to SEQ~~
~~ID NO: 22 under low stringency conditions, wherein said conditions comprise hybridization at~~
~~42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with~~
~~about 1M to about 2M salt.~~

13. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2,~~
~~wherein said nucleic acid molecule comprises a~~ comprising the nucleotide sequence as set forth
in SEQ ID NO: 24, ~~or has at least about 60% similarity to SEQ ID NO: 24, or hybridizes to SEQ~~
~~ID NO: 24 under low stringency conditions, wherein said conditions comprise hybridization at~~
~~42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with~~
~~about 1M to about 2M salt.~~

14. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~
comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the
amino acid sequence as set forth in SEQ ID NO: 2 ~~or an amino acid sequence having at least~~
~~about 50% similarity thereto.~~

15. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~
~~comprising a sequence of nucleotides encoding or complementary to a sequence encoding an~~the
amino acid sequence as set forth in SEQ ID NO: 4 ~~or an amino acid sequence having at least~~
~~about 50% similarity thereto.~~

16. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 6 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

17. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 8 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

18. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 10 or SEQ ID NO:11 or SEQ ID NO:12 or SEQ ID NO:13 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

19. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 15 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

20. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 17 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

21. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 19 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

22. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 21 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

23. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 23 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

24. (Currently amended) ~~The~~An isolated nucleic acid molecule ~~according to claim 2~~ comprising a sequence of nucleotides encoding or complementary to a sequence encoding ~~an~~the amino acid sequence as set forth in SEQ ID NO: 25 ~~or an amino acid sequence having at least about 50% similarity thereto.~~

25. (Previously canceled)

26. (Currently amended) A genetic construct capable of reducing expression of an endogenous gene encoding a flavonoid 3'-hydroxylase in a plant, said genetic construct comprising a nucleotide sequence selected from the group consisting of:

- (i) a nucleotide sequence encoding ~~the~~an amino acid sequence selected from the group consisting of ~~set forth in one of~~ SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 15, SEQ ID NO: 17, SEQ ID NO: 19, SEQ ID NO: 21, SEQ ID NO: 23, ~~or~~and SEQ ID NO: 25; and
- (ii) ~~the~~a nucleotide sequence selected from the group consisting of ~~set forth in one of~~ SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 14, SEQ ID NO: 16, SEQ ID NO: 18, SEQ ID NO: 20, SEQ ID NO: 22 or SEQ ID NO: 24, ~~or~~and the coding region in SEQ ID NO: 9;
- ~~(iii) a nucleotide sequence having at least about 60 % similarity to (i) or (ii); and~~

~~(iv) a nucleotide sequence which hybridizes under low stringency conditions to (i), (ii) or (iii) wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.~~

27. (Currently amended) A method for producing a transgenic plant which synthesizes a flavonoid 3'-hydroxylase, said method comprising stably transforming a cell of a plant with ~~a~~the nucleic acid molecule according to any one of claims 3-24~~which comprises a sequence of nucleotides encoding said flavonoid 3'-hydroxylase~~ under conditions wherein said nucleic acid molecule is expressed, regenerating a transgenic plant from the transformed cell, and growing said transgenic plant for a time and under conditions wherein the nucleic acid molecule is expressed.

28-29. (Currently canceled)

30. (Currently amended) The method according to claim 27 ~~or 28~~ wherein said plant is selected from the group consisting of petunia, carnation, chrysanthemum, rose, snapdragon, tobacco, cornflower, pelargonium, lisianthus, gerbera, apple, iris, lily, African violet and morning glory.

31-32. (Currently canceled)

33. (Currently amended) A transgenic plant having tissue exhibiting altered colour, said transgenic plant comprising a nucleic acid molecule which comprises~~comprising~~ a sequence of nucleotides selected from the group consisting of:

- (i) a nucleotide sequence encoding ~~the~~an amino acid sequence selected from the group consisting of~~set forth in one of~~ SEQ ID NO:2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 15, SEQ ID NO: 17, SEQ ID NO: 19, SEQ ID NO: 21, SEQ ID NO: 23, or SEQ ID NO: 25; and

(ii) ~~the~~ a nucleotide sequence ~~set forth in one of~~ selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 14, SEQ ID NO: 16, SEQ ID NO: 18, SEQ ID NO: 20, SEQ ID NO: 22 or SEQ ID NO: 24, ~~or~~ and the coding region in SEQ ID NO: 9;

~~(iii) a nucleotide sequence having at least about 60 % similarity to (i) or (ii); and~~

~~(iv) a nucleotide sequence which hybridizes under low stringency conditions to (i), (ii) or (iii) wherein said conditions comprise hybridization at 42°C in about 1% to about 15% formamide and about 1M to about 2M salt, and washing with about 1M to about 2M salt.~~

33. 34. (Currently amended) The cut flower from athe transgenic plant according to claim

35. (Currently amended) The seed from athe transgenic plant according to claim 33.

36. (Currently amended) The fruit from athe transgenic plant according to claim 33.

37. (Currently amended) The leaf from athe transgenic plant according to claim 33.

38-39. (Previously canceled)
